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The Omaha Barometer

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2019

THE BAROMETER

An economic scorecard of the Omaha region



GREATER
OMAHA
CHAMBER

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Any questions regarding this
report should be directed to
the Greater Omaha Chamber,
Business Intelligence
department at 402-346-5000.

WHERE DOES OMAHA STAND?

We can wait for the future or we can invent it.

As the Greater Omaha Chamber launches Prosper 2.0, we are focused on creating a bold, new future based on people, place and business growth.

Through economic diversification, investment, and commitment to catalytic change, we can leverage our most powerful assets to encourage stronger population growth through talent attraction development and retention – all while advancing opportunities for business growth and community-building.

Where do we stand today? The 2019 Barometer is our measuring stick, a chance for us to take a hard look at our progress and evaluate our region compared to others. To do this, we gauge our standing in eight key economic and performance-related areas: Growth, Human Capital, Innovation, Entrepreneurship, Infrastructure, Cost of Doing Business, Quality of Life and Private Capital. We benchmark ourselves against nine selected cities that are either our peers, competitors or thriving centers of growth and innovation.

After comparing ourselves to these high-performing cities, the 2019 Barometer shows that Omaha performs well across several areas and often ranks in the middle. While Omaha has performed consistently well, it has advanced at a slower pace than our aspirational cities. Our strengths include abundant arts and cultural opportunities, high standard of living, entrepreneurship and low costs of doing business. We're constantly evaluative and have identified room for growth in innovative capacity, infrastructure, aspects of human capital and in job growth.

Based on our progress so far, we know an ambitious and prosperous future is within our reach. Working together, and with your support, we can transform what "could be" into what "will be" and achieve our greatest potential as a region.

Best regards,



President & CEO



Building on progress. Accelerating toward prosperity.

COMPARISON CITIES

We chose each of the nine comparison cities for the 2019 Barometer for very specific reasons.

PEERS

► Salt Lake City, UT

SLC has a metropolitan area population of 1.2 million people. While the landscape of the region is very different than ours, we have aspects in common, including proximity to an air force base that serves as one of the state's largest employers. The SLC region is a center for healthcare in Utah, and a national hub for innovation and entrepreneurship in the technology industry.

► Louisville, KY

This region of 1.3 million people crosses state lines into Indiana and is home to several post-secondary institutions, including University of Louisville and several smaller private four-year colleges. Located 40 miles northeast of Fort Knox, Louisville, like Omaha, has a strong military presence. It is the cultural and healthcare center for Kentucky and boasts a large transportation industry. Louisville is located 100 miles southwest of Cincinnati, a much larger city with professional baseball and football teams, similar to Omaha's relationship with Kansas City.

► Colorado Springs, CO

With a metropolitan population of more than 700,000, Colorado Springs is smaller than Omaha. Colorado Springs boasts two major military installations — Peterson Air Force Base and Colorado Springs Army Air Base. Major industries include healthcare and professional, scientific and technical services.

COMPETITORS

► Des Moines, IA

A fellow Midwestern city, Des Moines' major industries are finance and insurance, healthcare and social assistance. Its metropolitan population comes in at more than 600,000, and much like Omaha, it sits at the intersection of two major interstates: I-80 and I-35. Des Moines' low cost of living and affordable wages make it attractive to potential businesses.

► Kansas City, MO

This region's population of 2.1 million famously straddles two states, just like Omaha. Kansas City is known as a hub for financial services as an entrepreneurial and startup community. KC's population is well-educated: 35 percent of those 25 and older hold a bachelor's degree or higher.

► Oklahoma City, OK

With a population of 1.4 million, the Oklahoma City region boasts two medical schools and several major institutions, like Omaha. OKC is a healthcare center for its state and a national hub for the energy industry. Tinker Air Force Base is a major asset to the region.

ASPIRATIONAL CITIES

► Austin, TX

Austin has been overshadowed by Dallas and Houston for much of its life, but in the last 30 years, the city has come into its own. With its population of more than 2.1 million, Austin is home to a thriving creative class of entrepreneurs, innovators and musicians, as well as higher education institutions, including Texas State University and the Big 12 powerhouse of University of Texas at Austin.

► Raleigh, NC

Raleigh, with a population of 1.3 million, is positioned inside the research triangle where University of North Carolina at Chapel Hill, North Carolina State University, Duke University and three medical schools reside. Raleigh is a hotbed of high-tech activity and innovation, specifically in the areas of information technology and biotechnology.

► Nashville, TN

Nashville is known as the cradle of the country music industry, but it's also seen major economic development over the past four decades. Nearly 1.9 million people reside in the region's 13 counties and are the engine to its thriving entertainment scene, advanced manufacturing industry and higher education systems, including Middle Tennessee State University and Vanderbilt.

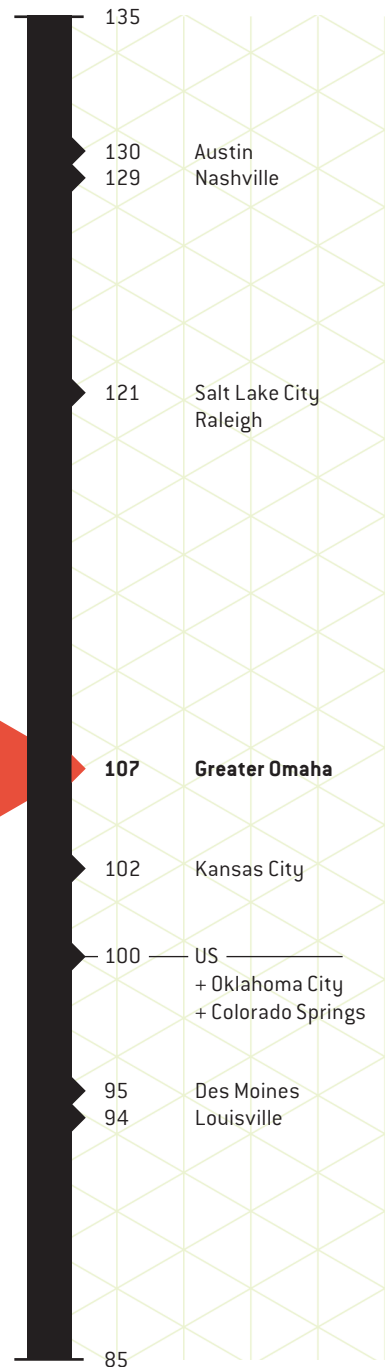
2019 RESULTS

The 2019 Barometer compares the economic performance and characteristics of Greater Omaha with nine other metros to reveal strengths and opportunities for growth. Greater Omaha continues to perform competitively when compared with these high-performing metros and has a strong advantage in entrepreneurship, business costs and aspects of growth and quality of life. Our forward progress, while ongoing, continues to be outpaced, however, when measured relative to the Barometer's aspirational cities.

Maintains overall rank of 5 and increases score to 107

- ▶ Greater Omaha continues to be ahead of the U.S. average
 - 7% above the U.S. for the overall index
- ▶ Upholds placement in front of three competitors and two peer cities
- ▶ Lags behind all three aspirational cities and one peer city

#5



2019 Index Ranks

- #6** **GROWTH**
- #8** **HUMAN CAPITAL**
- #5** **QUALITY OF LIFE**
- #3** **ENTREPRENEURSHIP**
- #5** **INNOVATION**
- #5** **INFRASTRUCTURE CAPACITY**
- #3** **BUSINESS COST**
- #5** **PRIVATE CAPITAL**

- Ranks high in Business Costs (3rd) & Entrepreneurship (3rd)
- Growth: Maintains ranking of 6th
 - > 14% above the national average
- Human Capital: Rose to 8th from 9th last year
 - > 2% above the U.S. average
- Innovation: Rose to 5th from 6th in 2018 due to improvements in NIH funding per job
- Private Capital: Decreased from 4th to 5th in 2019 due to slower local growth for some industries
- Sustained rankings on Quality of Life and Infrastructure

FIVE-YEAR RESULTS

Driving transformation. Striving for prosperity.

The Barometer shows our progress and evolution over the past five years. Have we accelerated economic growth compared to other thriving, successful cities, or maintained our current momentum? By examining the changes over time, the *2019 Barometer* helps us strengthen our advantages and uncover opportunities for further growth.

Results: 2015-2019

- **Maintains overall ranking of 5th**
 - > This does not mean our progress has stagnated. Now we are 7% higher than the national average. However, we compare ourselves against thriving cities who have continued to advance more quickly than we have.
- **Forward progress outpaced by high-performing comparison metros**
 - > We continue to fall further behind Nashville and Raleigh. While Greater Omaha remains ahead of Colorado Springs and Kansas City, these two metros are closing the gap.
 - > We need to sustain and accelerate improvement to move up the rankings.
- **Building on strengths**
 - > Growth: Remained at 6th for the past four years
 - > Innovation: Improvement in NIH funding per job in Omaha moved that measure from 6th to 5th
 - > Human Capital: Moved up from 9th in 2018 to 8th this year
- **Capitalizing on opportunities for growth**
 - > Entrepreneurship: Maintained ranking of 3rd. This is still an area of strength for us, but we need to vigilantly cultivate our entrepreneurs.
 - > Private Capital: Declined from 4th to 5th





GROWTH

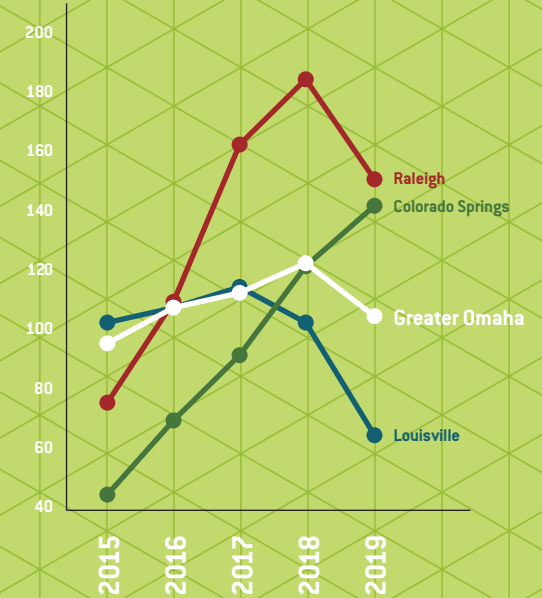
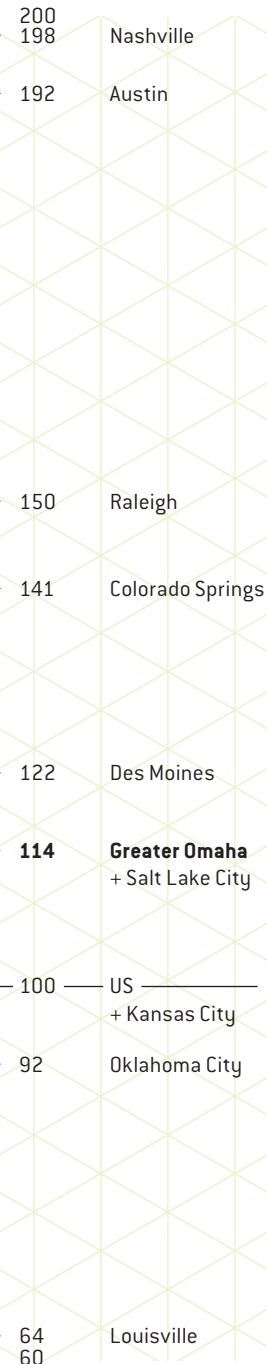
Prosperity often mirrors economic growth. Solid economic growth supports the performance of labor and property markets and ensures opportunity for locally oriented businesses. It also improves the likelihood that workers will stay employed and advance in their careers. Indicators of growth are the first, and considered by some researchers the most informative, barometer for a metropolitan economy.

Indicators of growth include:

- Real GDP by Metropolitan Area
- Total employment growth
- Private wage growth
- Private wages per job
- Unemployment rate



#6



Improved from 8th to 6th over past 5 years

- 23% gain since 2015
- CO Springs (No. 4) and Raleigh (No. 3) have overcome Greater Omaha's moderate pace

Ranks high in wage growth and unemployment rate but lags in GDP and employment growth



Total Employment

Source: Current Employment Statistics, Bureau of Labor Statistics, 2015-2018 (accessed Feb. 2019)

1	AUSTIN	215
2	COLORADO SPRINGS	199
3	NASHVILLE	185
4	RALEIGH	184
5	SALT LAKE CITY	171
6	DES MOINES	134
7	KANSAS CITY	108
8	LOUISVILLE	86
9	OKLAHOMA CITY	61
10	GREATER OMAHA	58

Total employment growth captures the expansion of private sector and government job opportunities.

Greater Omaha employment grew by a cumulative 2.9% between 2015 and 2018. Growth in comparison metropolitan areas was even more rapid, so Greater Omaha decreased to 10th.

Unemployment Rate

Source: Local Area Unemployment Statistics program, Bureau of Labor Statistics, 2018 (accessed Feb. 2019)

1	DES MOINES	62
2	NASHVILLE	71
3	GREATER OMAHA	74
4	AUSTIN	75
5	SALT LAKE CITY	77
6	OKLAHOMA CITY	84
7	KANSAS CITY	87
8	RALEIGH	87
9	COLORADO SPRINGS	94
10	LOUISVILLE	99

The unemployment rate typically rises during an economic recession and falls after the economy begins to recover. A low unemployment rate suggests an economy has experienced consistent growth.

Greater Omaha's average unemployment rate in 2018 was 2.9%.

Private Wages

Source: Current Employment Statistics, Bureau of Labor Statistics, 2015-2018 (accessed Feb. 2019)

1	NASHVILLE	207
2	AUSTIN	163
3	RALEIGH	154
4	COLORADO SPRINGS	147
5	GREATER OMAHA	126
6	OKLAHOMA CITY	119
7	KANSAS CITY	116
8	SALT LAKE CITY	98
9	DES MOINES	68
10	LOUISVILLE	47

Growth in private wages provides a more comprehensive measure of economic growth. This category reflects both the increase in hourly wages and hours worked per week, as well as change in the level of private employment. Thus, the measure reflects earnings power and the number of jobs created.

Greater Omaha's ranking has increased two spots, from 7th in 2015. From 2015 – 2018, private wages increased 18.3%.

Real GDP by Metro

Source: U.S. Economic Accounts, Bureau of Economic Analysis, 2015-2017 (accessed Dec. 2018)

1	AUSTIN	336
2	NASHVILLE	238
3	DES MOINES	218
4	RALEIGH	172
5	COLORADO SPRINGS	139
6	SALT LAKE CITY	118
7	GREATER OMAHA	76
8	LOUISVILLE	73
9	KANSAS CITY	33
10	OKLAHOMA CITY	0

Real (inflation adjusted) Gross Domestic Production (GDP) by metropolitan area provides a broad measure of economic output.

Greater Omaha's real GDP grew by a cumulative 2.9% between 2015 and 2017.

Private Wages per Job

Source: Current Employment Statistics, Bureau of Labor Statistics, 2015-2018 (accessed Feb. 2019)

1	NASHVILLE	216
2	GREATER OMAHA	176
3	OKLAHOMA CITY	161
4	KANSAS CITY	129
5	RALEIGH	127
6	AUSTIN	114
7	COLORADO SPRINGS	113
8	SALT LAKE CITY	54
9	DES MOINES	29
10	LOUISVILLE	14

Growth in private wages per job reflects improvement in the standard of living. Wages per job typically rise over time with inflation (and as the standard of living improves), but can fall when the economy creates new jobs with lower wages than existing jobs.

Greater Omaha's rank has improved from 5th five years ago to 2nd. From 2015 – 2018, private wages per job increased 14.7%.



HUMAN CAPITAL

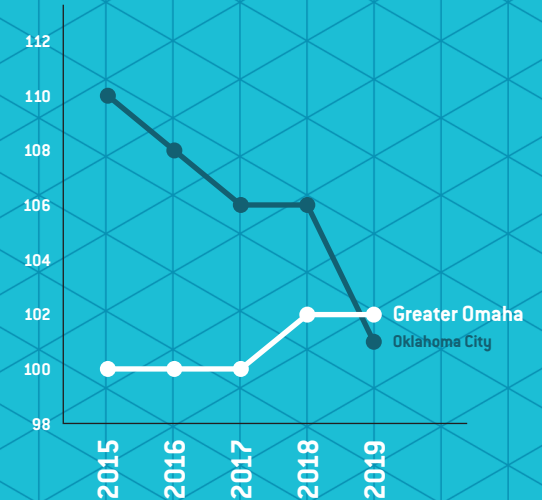
Human capital – the accumulated educational and occupational skill of the workforce – is critical for economic growth. A human capital index includes indicators of both experience and education, capturing the share of the workforce that continues to gain work experience, particularly in knowledge-intensive fields. After accounting for education and experience, a more diverse workforce brings a greater wealth of experience to the labor market. Growth in the labor force reflects how quickly the workforce is increasing, a necessary resource for businesses to expand.

Indicators of Human Capital include:

- High school attainment
- College attainment
- Labor force participation rate
- Percentage of knowledge workers
- Percentage of minority workforce
- Growth of population age 18+



#8



Rose from 9th in the previous year to 8th

- Greater Omaha's human capital has not decreased – grown 2.0% since 2015
- Omaha's human capital was rising while the human capital index declined in Oklahoma City

Ranks high on number of high school graduates and employed adults

Lags behind aspirational and some peer metros in college graduates and participation in knowledge-based jobs



HUMAN CAPITAL

High School Attainment (Age 25+)

Source: American Community Survey, U.S. Census Bureau, 2013-2017 (accessed Dec. 2018)

1	COLORADO SPRINGS	107
2	DES MOINES	106
3	KANSAS CITY	105
4	GREATER OMAHA	104
5	RALEIGH	104
6	SALT LAKE CITY	103
7	AUSTIN	102
8	LOUISVILLE	102
9	NASHVILLE	102
10	OKLAHOMA CITY	101

Graduating high school or obtaining a GED remains an important first step for individual success. Graduates are much better prepared to pursue opportunities in a changing economy compared to individuals who fail to finish school.

91.2% of people in Greater Omaha have a high school degree, giving us a rank of 4th. Greater Omaha ranked 3rd two years ago, but we are now slightly behind Kansas City.

Share of Knowledge Workers

Source: Occupation Employment Survey, U.S. Bureau of Labor Statistics, 2015-2017 (accessed Dec. 2018)

1	COLORADO SPRINGS	113
2	RALEIGH	112
3	AUSTIN	111
4	DES MOINES	109
5	KANSAS CITY	106
6	SALT LAKE CITY	105
7	OKLAHOMA CITY	104
8	GREATER OMAHA	101
9	NASHVILLE	97
10	LOUISVILLE	85

Workers who find employment in knowledge-based occupations can better maintain and grow their skills. The share of workers in knowledge-based occupations – such as managers, financial workers, scientists, teachers and health care professionals – is a key human capital indicator.

With 31.8% of workers in knowledge-based occupations, Greater Omaha reflects the national average and is about 4.0% behind No. 1 ranked Colorado Springs.

College Attainment (Age 25+)

Source: American Community Survey, U.S. Census Bureau, 2013-2017 (accessed Dec. 2018)

1	RALEIGH	146
2	AUSTIN	139
3	COLORADO SPRINGS	120
4	DES MOINES	117
5	KANSAS CITY	116
6	GREATER OMAHA	114
7	NASHVILLE	110
8	SALT LAKE CITY	107
9	OKLAHOMA CITY	96
10	LOUISVILLE	91

Graduating college provides improved opportunities for careers in a variety of higher paying, knowledge-intensive industries.

Greater Omaha has 4.2% more college graduates (35.1%) than the national average (30.9%).

Percent Minority Workforce

Source: Quarterly Workforce Indicators, U.S. Census Bureau, 2015-2017, End of Quarter (accessed Jan. 2019)

1	AUSTIN	125
2	RALEIGH	101
3	OKLAHOMA CITY	87
4	COLORADO SPRINGS	74
5	NASHVILLE	71
6	KANSAS CITY	67
7	SALT LAKE CITY	61
8	LOUISVILLE	60
9	GREATER OMAHA	58
10	DES MOINES	41

Along with skill and experience, workforce diversity is another key component of human capital. A diverse workforce brings a larger set of perspectives and experience to the workplace, potentially offering a broader set of solutions to the challenges which businesses must solve.

Racial and ethnic minorities accounted for an average of 20% of the Greater Omaha workforce during the 2015 to 2017 period. Greater Omaha ranked 9th, ahead of only Des Moines. The share of minority workforce has been rising steadily in Greater Omaha, from 17.0% in 2010 to 21.1% in 2017, but Greater Omaha has remained ranked 9th.

Labor Force Participation Rate

Source: American Community Survey, U.S. Census Bureau, 2013-2017 (accessed Dec. 2018)

1	DES MOINES	114
2	SALT LAKE CITY	112
3	GREATER OMAHA	112
4	AUSTIN	111
5	RALEIGH	109
6	KANSAS CITY	107
7	NASHVILLE	107
8	COLORADO SPRINGS	106
9	OKLAHOMA CITY	103
10	LOUISVILLE	103

Workers gain experience fastest in regions where a larger share of the population is participating in the work force. Thus, the labor force participation rate is a key measure of human capital development.

More than 70% of Greater Omaha adults are employed, which is 7% higher than the national average. Greater Omaha ranked 2nd two years ago, but has fallen slightly behind Salt Lake City.

Population 18 & Older Growth

Source: Population Estimates, U.S. Census Bureau, 2015-2017 (accessed Jan. 2019)

1	AUSTIN	348
2	RALEIGH	298
3	COLORADO SPRINGS	252
4	DES MOINES	213
5	SALT LAKE CITY	210
6	NASHVILLE	209
7	KANSAS CITY	135
8	GREATER OMAHA	123
9	OKLAHOMA CITY	118
10	LOUISVILLE	89

While workforce characteristics are a key measure of human capital, labor force growth also is critical. Businesses need strong growth in the supply of available workers to expand.

The population age 18 and over grew by 2.3% cumulatively in the Greater Omaha metropolitan area over the 2015 to 2017 period. This growth rate was 0.4% faster than the U.S. average but ranks 8th, ahead of only Kansas City and Louisville.



INNOVATION

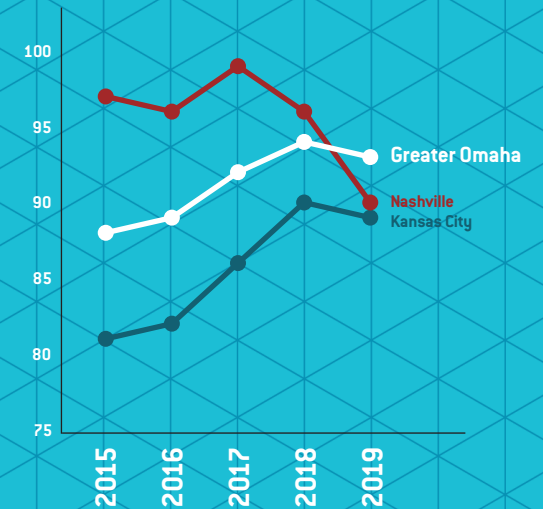
Innovation relates to the capacity to develop new methods and technologies with potential application in the economy. These technologies can spur high-value entrepreneurial ventures and enhance the productivity of workers. Innovation is measured via technical progress in both the private industry and education sector.

Indicators of innovation include:

- Share of jobs in tech positions
- IT sector share of jobs
- Patents per 10,000 workers
- NIH funding per job
- Science graduates



#5



Ranked 5th after ranking 6th for the past four years.

- Greater Omaha improved index score by 5% since 2015
- Passed Nashville (No. 6) in 2019
 - > Due to improvements in NIH funding per job in Greater Omaha and a decline in NIH funding in Nashville
- Nashville (No. 6) and Kansas City (No. 7) are just below Omaha

Strengthens innovation in scientific research, especially NIH funding and science-related grads

Lags in patents per worker



INNOVATION

Share of Jobs in Technology Positions

Source: Occupation Employment Survey, Bureau of Labor Statistics, 2015-2017 (accessed Jan. 2019)

1	AUSTIN	174
2	RALEIGH	167
3	COLORADO SPRINGS	152
4	SALT LAKE CITY	120
5	KANSAS CITY	120
6	GREATER OMAHA	105
7	DES MOINES	98
8	OKLAHOMA CITY	96
9	NASHVILLE	80
10	LOUISVILLE	69

Private sector innovation occurs at businesses throughout the economy and can be tracked through the concentration of workers in occupations and industries where scientific work and product-development take place.

Rates of innovation are elevated in metropolitan areas with a larger share of the work force in the following occupations: computer and mathematical; engineering; and life, physical and biological science.

Greater Omaha has 5.8% of its jobs in tech positions, which is 0.2% above the national average.

Science-Related Graduate Students per Capita

Source: National Center for Education Statistics, 2016-2017 (accessed Jan. 2019)

1	RALEIGH	273
2	OKLAHOMA CITY	128
3	AUSTIN	115
4	SALT LAKE CITY	113
5	GREATER OMAHA	105
6	LOUISVILLE	77
7	COLORADO SPRINGS	74
8	NASHVILLE	57
9	KANSAS CITY	56
10	DES MOINES	0

Innovative research in biomedical, computer science, engineering and physical science fields is achieved through a combination of faculty and graduate students. A concentration of graduate students in a metropolitan area indicates a focus on research activity.

Since last year, Greater Omaha decreased its rank two spots from 3rd to 5th. Our 4.9 grads per 10,000 people are slightly above the metro average of 4.6.

Share of Jobs in the Information Technology Industries

Source: County Business Patterns database, U.S. Census Bureau, 2015-2016 (accessed Jan. 2019)

1	AUSTIN	291
2	RALEIGH	227
3	COLORADO SPRINGS	214
4	KANSAS CITY	142
5	SALT LAKE CITY	134
6	GREATER OMAHA	119
7	DES MOINES	83
8	NASHVILLE	69
9	OKLAHOMA CITY	53
10	LOUISVILLE	42

Rates of innovation also are elevated in metropolitan areas with a larger share of the workforce in software publishing, data processing and hosting, internet publishing and broadcasting and computer systems design industries.

IT industries comprise 2.8% of Greater Omaha's economy. This is slightly better than the national average of 2.4%.

NIH Awards per Job

Source: National Institutes of Health, 2015-2018 (accessed February 2019)

1	NASHVILLE	216
2	SALT LAKE CITY	149
3	GREATER OMAHA	100
4	RALEIGH	99
5	OKLAHOMA CITY	71
6	LOUISVILLE	54
7	AUSTIN	46
8	KANSAS CITY	43
9	COLORADO SPRINGS	11
10	DES MOINES	2

The National Institutes of Health (NIH) provide grant funding to innovative biomedical research. The level of NIH funding per worker in a metropolitan area shows biomedical innovation in universities, research institutes and private businesses.

Greater Omaha increased its rank to 3rd for 2019 and is now above the national average.

Patents per 10,000 Workers

Source: U.S. Patent and Innovation Office, 2013-2015 (accessed Feb. 2018)

1	AUSTIN	294
2	RALEIGH	265
3	SALT LAKE CITY	96
4	COLORADO SPRINGS	86
5	KANSAS CITY	85
6	DES MOINES	70
7	LOUISVILLE	42
8	GREATER OMAHA	38
9	NASHVILLE	27
10	OKLAHOMA CITY	24

Patent activity broadly measures innovation by capturing the development of new products and technologies throughout the economy. Patents per 10,000 workers provides a measure of the concentration of activity within a metropolitan area.

With only 3.8 patents per 10K workers, Greater Omaha trails the national average of 10.0, but remains ahead of one aspirational and one competitor metro.



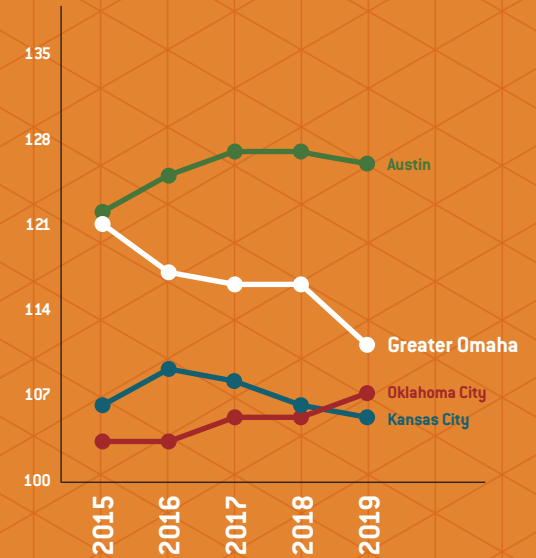
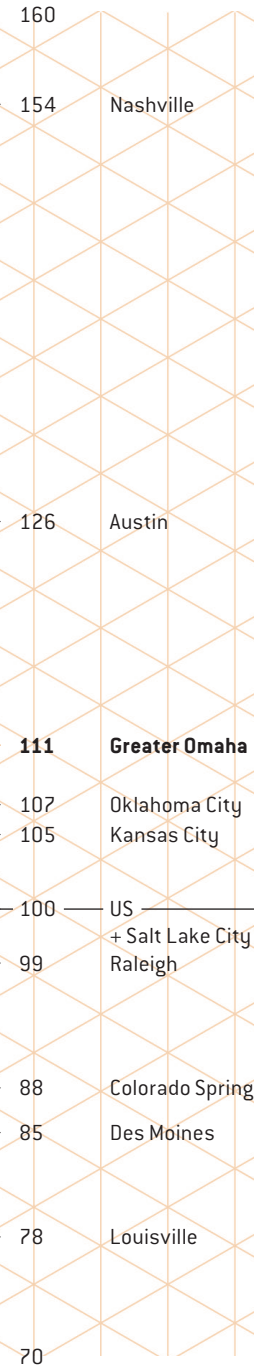
ENTREPRENEURSHIP

Arguably the most critical type of human capital in a market economy, entrepreneurs combine workers, capital and other key resources to introduce new or improved products and meet growing demand. As a result, metropolitan areas with a more entrepreneurial population achieve faster growth.

Indicators of entrepreneurship include:

- Non-farm proprietors
- Non-farm proprietor income share
- Business services share of employment
- Average income per non-farm proprietor
- Minority entrepreneurship

#3



Sustains rank of 3rd for the past four years, but had a rank of 2nd five years ago

- Index value averages about 11% above the U.S.
- > Greater Omaha's index value fell due to trends in proprietor income

Our successful entrepreneurs earn more than other metros

Fewer people are entrepreneurs

ENTREPRENEURSHIP

Non-Farm Proprietor per Person

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2015-2017 (accessed Jan. 2019)

1	AUSTIN	133
2	NASHVILLE	123
3	OKLAHOMA CITY	117
4	SALT LAKE CITY	113
5	RALEIGH	106
6	COLORADO SPRINGS	100
7	DES MOINES	95
8	KANSAS CITY	93
9	GREATER OMAHA	86
10	LOUISVILLE	83

The percent of the population that owns a business (non-farm proprietorship) is the first measure of the entrepreneurial activity.

Greater Omaha has maintained its rank of 9th for the past five years. In 2019, we had 0.11 proprietorships per person, less than the national average of 0.13.

Business Services Employment Share

Source: Current Employment Statistics, U.S. Bureau of Labor Statistics, 2015-2018 (accessed Jan. 2019)

1	AUSTIN	161
2	RALEIGH	143
3	KANSAS CITY	140
4	COLORADO SPRINGS	139
5	SALT LAKE CITY	120
6	NASHVILLE	104
7	DES MOINES	87
8	GREATER OMAHA	86
9	OKLAHOMA CITY	83
10	LOUISVILLE	76

The business services sector includes some of the most dynamic parts of the economy including information technology, science and engineering. New businesses are commonly created in this growing sector. The percentage of people working in the business services sector captures this creation of high-value new businesses.

Similar to the number of small business owners, we lag on this indicator. Only 5.3% of our jobs are in business services, just under the national average of 6.2%. Greater Omaha's rank decreased from 7th to 8th in 2019.

Non-Farm Proprietor Income Share

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2015-2017 (accessed Jan. 2019)

1	NASHVILLE	245
2	GREATER OMAHA	139
3	OKLAHOMA CITY	135
4	AUSTIN	134
5	SALT LAKE CITY	107
6	KANSAS CITY	105
7	DES MOINES	81
8	RALEIGH	77
9	LOUISVILLE	75
10	COLORADO SPRINGS	66

The percent of non-farm income earned by entrepreneurs (non-farm proprietors) provides another measure of entrepreneurship within the economy. This indicator reflects both the number of people engaged in entrepreneurship as well as the earnings of entrepreneurs.

Entrepreneurs earn 12.1% of all non-farm income in Greater Omaha, more than the national average of 8.7%. Our successful entrepreneurs have boosted us to 2nd for five straight years.

Minority Entrepreneurship Share

Source: Survey of Business Owners, U.S. Census Bureau, 2012

1	AUSTIN	93
2	RALEIGH	92
3	OKLAHOMA CITY	92
4	NASHVILLE	83
5	DES MOINES	73
6	LOUISVILLE	73
7	COLORADO SPRINGS	73
8	SALT LAKE CITY	72
9	GREATER OMAHA	71
10	KANSAS CITY	71

The proportion of the minority population which owns a business is another key measure of entrepreneurial activity. The number of minority businesses were divided by the total minority population in that year. (Data from the 2012 survey will not be available until later in 2019.)

A smaller percent (5.0%) of the minority population owns a business in Greater Omaha than the national average (7.0%). We are very close to our peer, Salt Lake City (No. 8).

Income per Non-Farm Proprietor

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2015-2017 (accessed Jan. 2019)

1	NASHVILLE	215
2	GREATER OMAHA	172
3	KANSAS CITY	114
4	AUSTIN	107
5	OKLAHOMA CITY	106
6	SALT LAKE CITY	90
7	DES MOINES	88
8	LOUISVILLE	83
9	RALEIGH	74
10	COLORADO SPRINGS	60

Income per proprietor rises when business owners operate in fields that are more lucrative and engage in full-time, rather than part-time, entrepreneurship.

Our entrepreneurs excel in their respective businesses, earning more than \$58,000 per year.

While Greater Omaha is 72% above the national average, our advantage has eroded somewhat due to a recent drop in non-farm proprietor income. Five years ago, Omaha was 100% above the U.S. average.



INFRASTRUCTURE

Metropolitan areas which serve as a hub for transportation activity have important additional advantages for growth. For example, hubs for air travel give headquarter locations direct-flight options to visit out-of-town clients. Multiple interstate highways or a thriving local logistics industry provide manufacturing and warehousing firms a competitive edge.

Indicators of Infrastructure Capacity include:

- Miles of interstate highway
- Air passenger enplanements
- Transportation services



#5

185

179

Salt Lake City

150

Nashville

127

Kansas City

122

Louisville

101

Greater Omaha

100

US

94

Oklahoma City

79

Austin

70

Raleigh

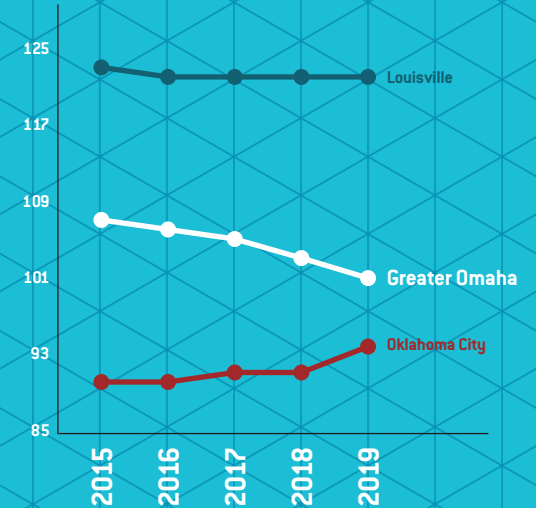
66

Des Moines

30

Colorado Springs

25



Sustained rank of 5th since 2015

- Steady rank hides that our score has declined due to fewer jobs in transportation services
- Falling further behind 4th ranked Louisville and losing ground to Oklahoma City (No. 6)
 - > Oklahoma City could overtake Greater Omaha if recent trends continue

Miles of Interstate Highway

Source: Transportation maps of relevant state transportation agencies

1	NASHVILLE	171
2	OKLAHOMA CITY	151
3	SALT LAKE CITY	134
4	KANSAS CITY	129
5	GREATER OMAHA	120
6	LOUISVILLE	109
7	DES MOINES	87
8	AUSTIN	39
9	RALEIGH	32
10	COLORADO SPRINGS	28

Metropolitan areas served by multiple interstate highways – or with abundant industrial sites along highways – have significant advantages for location and growth of manufacturing and warehousing activity. The miles of interstate highway located within a metropolitan area reflects both the length and number of interstates that traverse each metro.

We have 199 miles of interstate highway. The average for the 10 metros is 167 miles.

Passenger Enplanements

Source: Federal Aviation Administration, 2015-2017 [accessed Feb. 2019]

1	SALT LAKE CITY	265
2	NASHVILLE	151
3	AUSTIN	149
4	KANSAS CITY	128
5	RALEIGH	128
6	GREATER OMAHA	51
7	OKLAHOMA CITY	44
8	LOUISVILLE	39
9	DES MOINES	29
10	COLORADO SPRINGS	16

Airports that serve as hubs for national travel, or draw on a large regional passenger base, generate high levels of passenger travel and a variety of route options. Consequently, metropolitan areas containing airports with more passenger enplanements would provide an advantage to local business travelers.

With almost 2.1 million enplanements, we rank 6th and fall below the 10-metro average of 4.2 million. Our passenger enplanements have been steadily increasing, but at a slower pace than our comparisons.

Transportation Services

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics, 2015-2017 [accessed Feb. 2019]

1	LOUISVILLE	217
2	SALT LAKE CITY	138
3	GREATER OMAHA	131
4	NASHVILLE	128
5	KANSAS CITY	122
6	OKLAHOMA CITY	87
7	DES MOINES	83
8	RALEIGH	50
9	AUSTIN	49
10	COLORADO SPRINGS	46

A large, local transportation and logistics industry provides an advantage for businesses. We capture these benefits through the share of metropolitan area employment in the transportation and warehousing industry.

Transportation services comprise 4.4% of our jobs, placing us ahead of the national average of 3.4%.



COST OF DOING BUSINESS

#3

Businesses operating within a metropolitan area face a variety of common “costs of doing business” that can make a serious impact on the bottom line.

Indicators of this index include:

- Hourly wage rates
- Space rental rates
- Industrial energy rates

130

Oklahoma City

Louisville

Greater Omaha

Des Moines

Colorado Springs

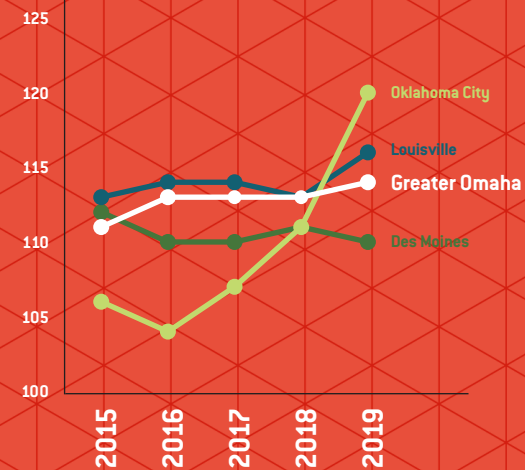
US

Kansas City

Austin
+ Salt Lake City
Nashville

Raleigh

90



Rank fell one spot from 2nd to 3rd in 2019

- Score improved 3% since 2015
- Greater Omaha fell behind Oklahoma City because Oklahoma City experienced a sharp drop in industrial energy costs and measured space rental costs
- Overtook Des Moines in 2015 and remains well ahead of the other seven metros



COST OF DOING BUSINESS

Labor Costs

Sources: Occupation Employment Survey, U.S. Bureau of Labor Statistics, 2015-2017 (accessed Feb. 2019)

Occupations: accountants, software developers, lawyers, retail salesperson, licensed practical nurses, industrial machinery mechanics, and heavy truck and tractor-trailers drivers

1	LOUISVILLE	84
2	OKLAHOMA CITY	86
3	GREATER OMAHA	88
4	NASHVILLE	91
5	KANSAS CITY	91
6	DES MOINES	92
7	SALT LAKE CITY	94
8	AUSTIN	96
9	RALEIGH	96
10	COLORADO SPRINGS	96

Labor costs, the greatest expense for many businesses, refer to the general level of wages required for workers given a particular skill level. Labor costs are best measured by comparing hourly wages across metropolitan areas for a set of common occupations that reflect various skill and education levels.

We improved our ranking to 3rd from 5th five years ago. Our average wage rate for these occupations is \$29.50, 12% below the national average.

Space Costs

Sources: NAI Partners, Quantum Commercial Group, CBRE Hubbell Commercial, Newmark Grubb Zimmer, Cushman & Wakefield, NAI Sullivan Group, NAI NP Dodge, Newmark Grubb Acres, Loopnet (Feb. 2017 for Cushman & Wakefield)

1	LOUISVILLE	81
2	OKLAHOMA CITY	83
3	GREATER OMAHA	84
4	DES MOINES	85
5	COLORADO SPRINGS	89
6	KANSAS CITY	90
7	SALT LAKE CITY	105
8	NASHVILLE	113
9	RALEIGH	115
10	AUSTIN	156

Space costs are compared on a per-square-foot basis and reflect the costs for all types of business properties, including industrial, commercial and retail properties.

With our average rental rates of \$12 per square foot, we rank 3rd, climbing up from 4th in 2016.

Industrial Energy Costs

Sources: Lincoln Electric Systems' National Electric Rates Survey (2015-2018)

Energy Information Administration, U.S. Department of Energy (state natural gas rates), 2015-2018

1	OKLAHOMA CITY	80
2	AUSTIN	81
3	GREATER OMAHA	92
4	LOUISVILLE	94
5	DES MOINES	95
6	COLORADO SPRINGS	110
7	NASHVILLE	112
8	SALT LAKE CITY	113
9	RALEIGH	116
10	KANSAS CITY	136

Utility costs refer to the bundle of utilities, including electric, natural gas, water and sewer and broadband access. Consistent, comparable measures of cost, however, are limited for utilities and are most feasible for electric and natural gas utility rates. This indicator reflects average industrial rates for electricity and natural gas.

Our energy costs are 8.2% cheaper than the national average, giving us a rank of 3rd.



QUALITY OF LIFE

Quality of life plays a key role in attracting and retaining talent in a metropolitan area, making it a significant consideration for businesses that rely on those employees.

Key quality of life components include:

- Cost of living
- Air quality
- Commute time
- Climate
- Health care access
- Natural recreation amenities
- Violent crime rate
- Arts and culture

#5



130

Salt Lake City

118

Nashville
+ Colorado Springs

115

Austin

114

Greater Omaha

111

Louisville

105

Des Moines
+ Raleigh

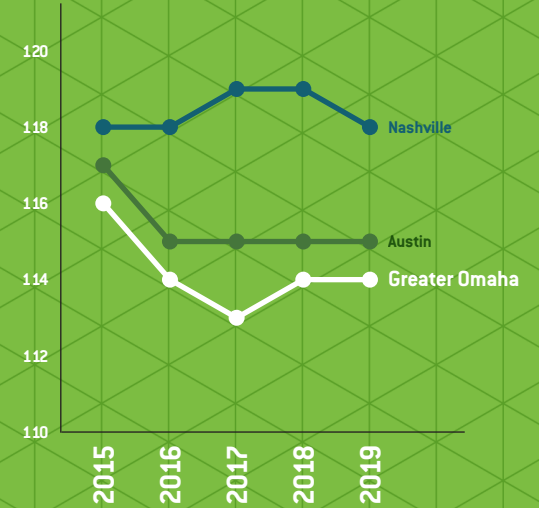
100

US
+ Oklahoma City

94

Kansas City

90



Upholding rank of 5th for the last five years

- Overtaking 4th-ranked Austin and could close gap with further improvements in human-made amenities

Gaining momentum in decreasing violent crime

Leading in abundant arts and cultural opportunities (No. 2), accessible health care (No. 1) and quick commute times (No. 1)

Natural disadvantages in climate and natural recreation amenities



QUALITY OF LIFE

Cost of Living

Source: Council for Community and Economic Research, 2018 Q1 – Q3 Average.

1	OKLAHOMA CITY	85
2	DES MOINES	90
3	RALEIGH	92
4	LOUISVILLE	94
5	GREATER OMAHA	95
6	KANSAS CITY	95
7	COLORADO SPRINGS	98
8	AUSTIN	98
9	NASHVILLE	99
10	SALT LAKE CITY	102

Cost of living is a comprehensive measure of the cost of household goods and services, such as housing, groceries, utilities and other common services.

Greater Omaha's cost of living is 4.9% below the national average, slightly higher than Kansas City and slightly lower than Louisville.

Violent Crime Rate

Source: Unified Crime Reports, Federal Bureau of Investigations, 2015-2017 (accessed Feb. 2019)

1	RALEIGH	61
2	AUSTIN	80
3	GREATER OMAHA	93
4	DES MOINES	96
5	SALT LAKE CITY	104
6	COLORADO SPRINGS	105
7	LOUISVILLE	112
8	OKLAHOMA CITY	127
9	KANSAS CITY	158
10	NASHVILLE	163

Personal safety is a critical component of quality of life and can be captured by the violent crime rate. This indicator compares violent crimes per 100,000 people across the metros.

People commit 7.2% fewer violent crimes in Greater Omaha than the U.S., an improvement over 2015 when we were ranked 6th.

Commute Time

Source: American Community Survey, U.S. Census Bureau, 2013-2017 (accessed Jan. 2019)

1	GREATER OMAHA	77
2	DES MOINES	77
3	SALT LAKE CITY	85
4	OKLAHOMA CITY	86
5	KANSAS CITY	87
6	COLORADO SPRINGS	88
7	LOUISVILLE	91
8	RALEIGH	98
9	AUSTIN	102
10	NASHVILLE	103

Commute time is a measure of the cost of living in terms of time, showing the ease of travel to destinations around a metropolitan area.

Greater Omaha's average commute is 20.2 minutes, almost six minutes faster than the national average.

Arts and Culture

Source (accessed Jan. 2019): Quarterly Census of Employment & Wages, U.S. Bureau of Labor Statistics, 2015-2016
County Business Patterns, U.S. Census Bureau, 2015-2016

1	NASHVILLE	213
2	GREATER OMAHA	185
3	DES MOINES	133
4	SALT LAKE CITY	121
5	LOUISVILLE	106
6	KANSAS CITY	97
7	COLORADO SPRINGS	95
8	AUSTIN	86
9	OKLAHOMA CITY	78
10	RALEIGH	68

Access to arts and cultural opportunities is another key component to quality of life. Access rises with the number and level of activity at performance companies, presenting organizations, museums and zoos. Since some organizations do not report attendance, activity is measured via employment in arts and cultural activities per person.

Greater Omaha offers abundant arts and cultural opportunities with 1.57 arts/cultural jobs per person, compared to the U.S. average of 0.85. We trail just behind Nashville and have been 2nd since 2015.

Health Care Access

Source (accessed Jan. 2019): Occupational Employment Survey, Bureau of Labor Statistics, 2015-2017
Regional Economic Information System, U.S. Bureau of Economic Analysis, 2015-2017

1	GREATER OMAHA	130
2	LOUISVILLE	128
3	NASHVILLE	123
4	KANSAS CITY	123
5	OKLAHOMA CITY	116
6	SALT LAKE CITY	116
7	DES MOINES	115
8	RALEIGH	91
9	COLORADO SPRINGS	87
10	AUSTIN	83

Access to health care, a key quality of life amenity, generally rises when doctors, nurses and other health care professions account for a larger share of the workforce.

Number-one-ranked Greater Omaha beats the national average by 0.7% with 3.3% of our population working in healthcare jobs.

Air Quality

Source: Air Quality Index Report, Environmental Protection Agency, 2015-2017 (accessed Jan. 2019)

1	DES MOINES	102
2	RALEIGH	102
3	COLORADO SPRINGS	102
4	NASHVILLE	102
5	GREATER OMAHA	101
6	OKLAHOMA CITY	101
7	AUSTIN	101
8	LOUISVILLE	99
9	KANSAS CITY	97
10	SALT LAKE CITY	93

Air quality is a critical indicator of pollution, measured for metropolitan areas by the Environmental Protection Agency (EPA). The EPA reports the share of days with good or moderate air quality each year.

In Greater Omaha, 99.0% of the time, we have good or moderate air quality, slightly above the 10-metro average of 97.7%. However, our air quality has incrementally worsened, dropping us from 2nd to 5th in five years.



QUALITY OF LIFE

Climate

Source: Economic Research Service, U.S. Department of Agriculture

1	COLORADO SPRINGS	206
2	AUSTIN	140
3	SALT LAKE CITY	128
4	OKLAHOMA CITY	119
5	RALEIGH	109
6	KANSAS CITY	71
7	LOUISVILLE	70
8	NASHVILLE	67
9	GREATER OMAHA	56
10	DES MOINES	45

Quality of life also depends on climate. Key aspects of climate that contribute to comfort and outdoor activity include temperature, humidity and sunshine. The Economics Research Service has developed an index to measure climate amenities in metropolitan areas.

Omaha ranks 9th for climate amenities according to this index, primarily due to its cold winters and hot summers.

Natural Recreation Amenities

Source: Economic Research Service, U.S. Department of Agriculture

1	SALT LAKE CITY	254
2	NASHVILLE	183
3	AUSTIN	182
4	LOUISVILLE	175
5	COLORADO SPRINGS	145
6	DES MOINES	103
7	RALEIGH	94
8	GREATER OMAHA	92
9	KANSAS CITY	83
10	OKLAHOMA CITY	74

The natural recreation amenities available to a metropolitan area – such as temperature, humidity, sunshine, topography and access to water – affect quality of life as well.

Omaha ranks 8th for natural recreation amenities according to this index, primarily due to its flat topography and moderate access to water.



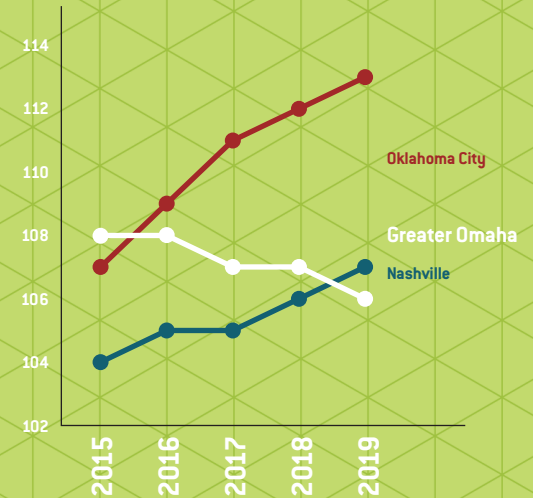
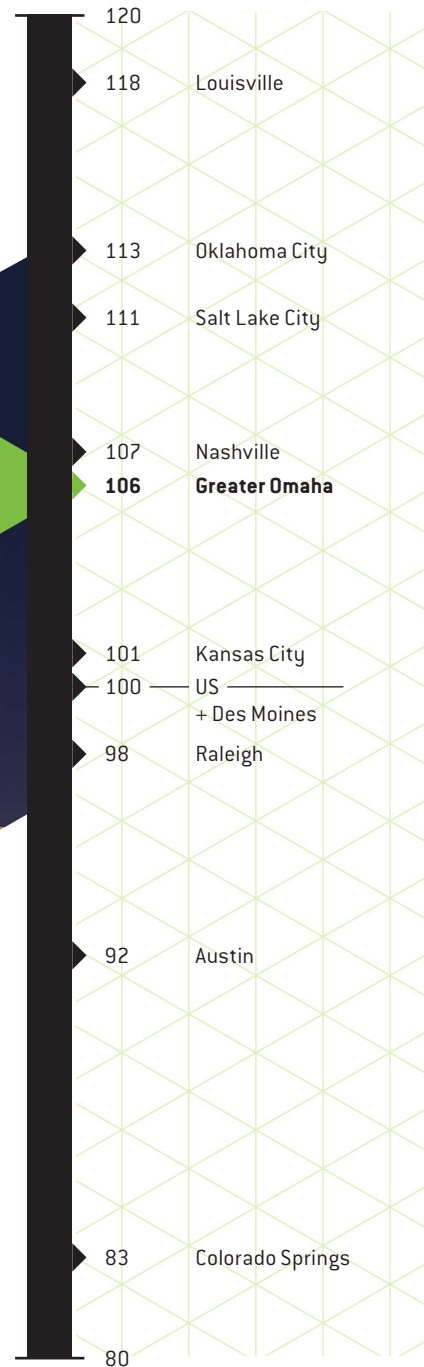
PRIVATE CAPITAL

Private capital such as machinery, software and buildings are a cornerstone of a productive economy. A stock of private capital complements human capital in raising worker productivity and ensures a larger metropolitan economy.

Indicators of Private Capital include:

- Equipment
- Structures
- Intellectual property products

#5



Fell from 3rd in 2015 to 5th in 2019

- 6% more private capital per job than nation, reflecting importance of goods-producing industries such as manufacturing and warehousing to Greater Omaha
- Passed by Oklahoma City because of their increase in the value of private structures

Possess strength in equipment and structures

Opportunities to improve stock of software or patented processes



PRIVATE CAPITAL

Private Equipment

Sources [accessed Feb. 2019]: National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2015-2017
Current Employment Statistics, U.S. Bureau of Labor Statistics, 2015-2017

1	LOUISVILLE	122
2	SALT LAKE CITY	109
3	GREATER OMAHA	106
4	NASHVILLE	106
5	DES MOINES	104
6	KANSAS CITY	102
7	OKLAHOMA CITY	99
8	RALEIGH	89
9	AUSTIN	86
10	COLORADO SPRINGS	80

Private equipment includes the equipment/machinery that employees use to produce goods and services in factories, construction sites, warehouses, offices, health care facilities and stores. Metros with a higher concentration of capital-intensive businesses have higher levels of private equipment per worker.

Our businesses possess \$47,921 in private equipment per job, 6.0% more than the national average.

Private Structures

Sources [accessed Feb. 2019]: National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2015-2017
Current Employment Statistics, U.S. Bureau of Labor Statistics, 2015-2017

1	OKLAHOMA CITY	165
2	LOUISVILLE	120
3	GREATER OMAHA	113
4	SALT LAKE CITY	109
5	NASHVILLE	105
6	DES MOINES	103
7	KANSAS CITY	102
8	RALEIGH	94
9	AUSTIN	88
10	COLORADO SPRINGS	87

Private structures house the factories, inventory, offices and stores that businesses use to serve their customers. The use and value of structures vary by industry, with industries such as manufacturing and warehousing often requiring more square feet of structures per worker.

Our businesses boast \$98,123 in private structures per job, 12.7% more than the national average.

Intellectual Property Products

Sources [accessed Feb. 2019]: National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2015-2017
Current Employment Statistics, U.S. Bureau of Labor Statistics, 2015-2017

1	SALT LAKE CITY	114
2	LOUISVILLE	111
3	RALEIGH	110
4	NASHVILLE	109
5	AUSTIN	102
6	GREATER OMAHA	100
7	KANSAS CITY	98
8	DES MOINES	94
9	COLORADO SPRINGS	84
10	OKLAHOMA CITY	76

Intellectual property products such as software or patented processes are key to the efficient and productive operation of businesses. The use of intellectual property products varies by industry but is especially prevalent in manufacturing.

Our businesses own \$20,993 in intellectual property products per job, comparable to the national average of \$21,097. This year we increased one rank to 6th from 7th in 2018.

SUMMARY

We have revealed our strengths and uncovered opportunities for further growth by stacking ourselves against nine other high-performing metros on eight key economic areas. The Barometer shows the evolution of these assets and areas of improvement over time. Overall, Greater Omaha upheld its rank of 5th for the sixth year in a row, striding farther ahead of the national average, but at a slower pace than many of our thriving comparison metros.

To continue to build on our progress and accelerate towards prosperity, we need to capitalize on our advantages and convert our growth opportunities into strengths:

OUR STRENGTHS



Growth

- ▶ Rapid rise in private wages, indicating a rising standard of living
- ▶ Low unemployment



Entrepreneurship

- ▶ Our prosperous entrepreneurs earn higher income than all of our comparisons



Innovation

- ▶ Increases in science-related grads and NIH funding per job (indication of scientific research)



Quality of Life

- ▶ Leader with rich arts and cultural options, accessible healthcare, and fast commutes
- ▶ Increases in public safety



Business Costs

- ▶ Maintaining position as one of the most affordable metros



Private Capital

- ▶ Valuable stock of private equipment and structures

OUR OPPORTUNITIES FOR GROWTH



Growth

- ▶ Slow, steady growth in jobs and GDP - Advantageous in that we minimize severe economic downturns but we are also losing ground to rapidly growing metros



Human Capital

- ▶ Lagging in college graduates, knowledge-based jobs and minority workforce



Innovation

- ▶ Lower concentration of both IT-related industries and tech workers



Entrepreneurship

- ▶ Our entrepreneurs are more successful, but less numerous than other metros, especially in the business services industry and among minorities



Infrastructure

- ▶ Fewer passenger enplanements and gradually decreasing transportation and services industry



Private Capital

- ▶ Trailing stock of software and patented processes



METHODOLOGY

In 2014, the Greater Omaha Chamber Research Department developed The Barometer: an Economic Scorecard of the Greater Omaha Region. In 2015, we contracted an objective third-party, the University of Nebraska-Lincoln Bureau of Business Research (BBR), to develop a new methodology for the Barometer. The 2019 Greater Omaha Barometer, is the sixth edition of the Barometer report. It was developed by the University of Nebraska-Lincoln Bureau of Business Research (BBR), in coordination with the Greater Omaha Chamber Research Department.

The 2019 Greater Omaha Barometer is designed to evaluate and compare the economic performance and characteristics of the Greater Omaha economy with nine other metropolitan areas from around the United States. These 9 comparison areas are a set of prosperous metros including nearby competitors and peers of Greater Omaha as well as the rapidly growing metropolitan areas of Austin, Raleigh and Nashville. Comparisons reveal strengths and challenges within the Greater Omaha economy.

The 2019 Greater Omaha Barometer explores metropolitan characteristics related to economic growth including human capital, private capital, infrastructure capacity, innovation, entrepreneurship, quality of life for households, and the cost of doing business. Index values for each characteristic are calculated for Greater Omaha and the nine comparison metropolitan areas of Austin, Colorado Springs, Des Moines, Kansas City, Louisville, Nashville, Oklahoma City, Raleigh and Salt Lake City. Indexes are calculated utilizing data from 2015 through 2018, or if 2018 data is not yet available, 2014 through 2017. All indicators were given an average index value equaling 100, based on either national averages or the average of all comparison cities, and then each comparison city was measured against that index value. Data on education attainment and other measures from the American Community Survey are based on 5-year averages, from 2013 through 2017. An index of economic growth also is calculated for each metropolitan area, based on growth from 2015 through 2018. The 2019 Greater Omaha Barometer therefore reflects current conditions and recent growth in the metropolitan economies.

Changes to the 2019 Barometer from earlier editions include:

- Time Comparison: Greater Omaha Barometer values were re-estimated four years prior using the same set of measures and indexes. This re-estimation will occur each year as data are revised and new measures added to the Barometer.
- Cost of Doing Business – Space Costs
 - Drop in space rental costs may have occurred due to a change in data source for industrial, commercial and retail rental space costs. Loopnet, used in the past, was not accessible for 2019.

The data gathering and analysis work was completed by the BBR from December 2018 through February 2019. All data sources are cited within the report.

Any questions regarding this report should be directed toward the Greater Omaha Chamber Business Intelligence Department at 402-345-5000.